# WHIRRAKEE

July 2000 Vol. 21 No. 6

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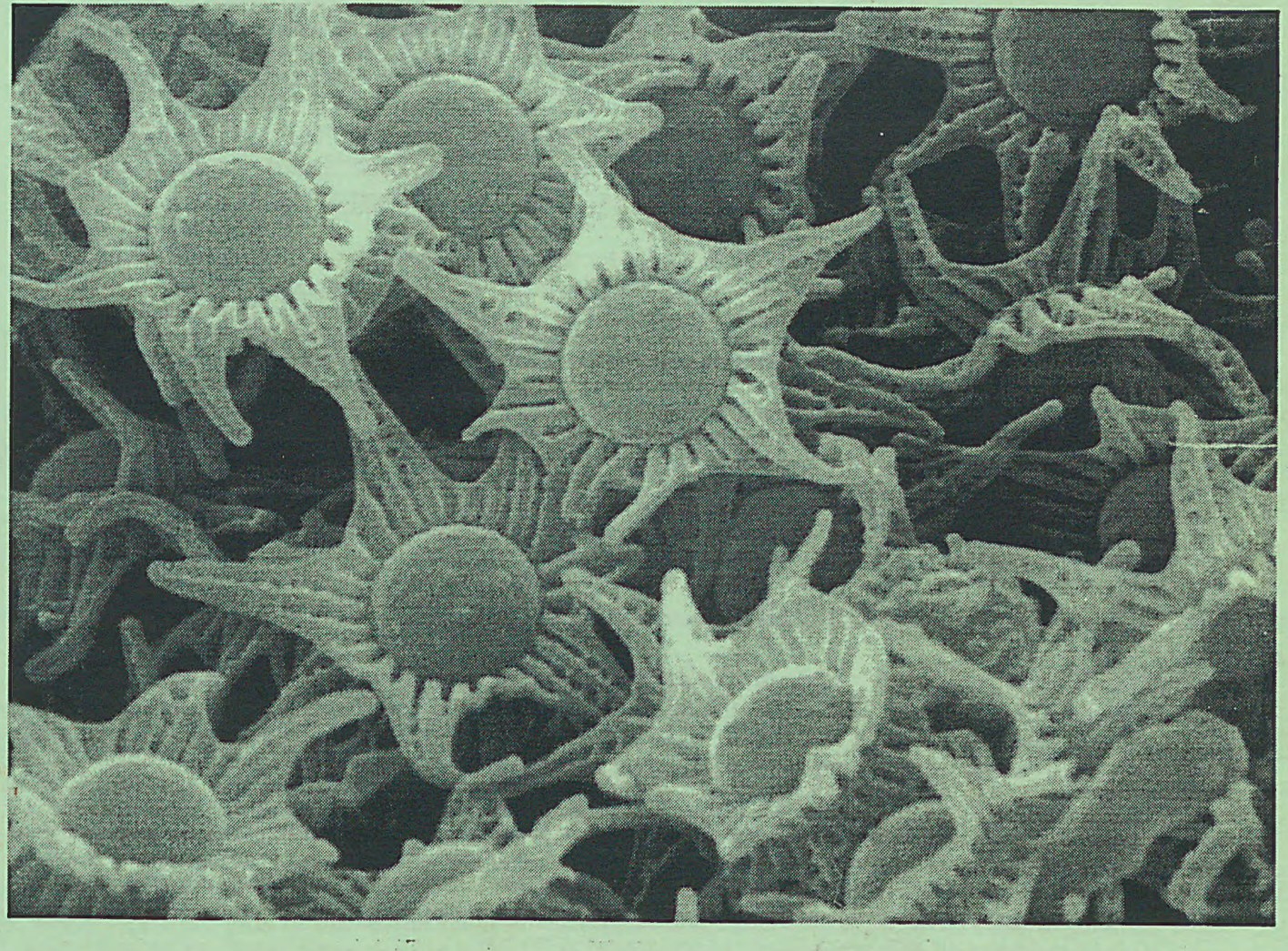

MONTHLY NEWSLETTER OF THE BENDIGO FIELD NATURALISTS CLUB

## Bendigo Field Naturalists Club Inc.

Address for correspondence: PO Box 396, Bendigo 3552

### Office Bearers for 1999 - 2000

| | | | |
|---|---|---|---|
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| Secretary | Anne Bridley | 39 Cootamundra Place, Junortoun | 5449 3479 |
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| Treasurer | Glenise Moors | Mandurang South Rd. Sedgwick | 5439 6254 |
| Membership Officer | Kate Lottkowitz | 80 Piccaninny Rd, RSD Strathfieldsaye | 5439 3157 |
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**Membership** of the Bendigo Field Naturalists Club is open to all those interested in Natural History. The new subscription rates are: Single $34; Family $40; Concession: Single $28.50; Family $34. *Whirrakee* subscription only is $34. These rates will apply from 1st of September 2000 and they will include GST.

**General meetings** are held on the second Wednesday of each month. The venue for General meetings is the Golden Square Senior Citizens Building, Old High Street, Golden Square. Meetings start at 7:30pm and conclude with supper. The Annual Meeting is held in September.

**Committee meetings** are held on the third Wednesday of each month at 7:30pm. Members of the Committee are the Office Bearers listed above, together with the following members: J. Cleary, D Collier; W N Holsworth; M Lewis; K Lottkowitz; R Moors; S Pelczinski; M Stone.

**Excursions** The assembly point for excursions is the Golden Square Senior Citizens Building, unless otherwise specified. Full-day excursions normally commence at 10am (usually on a Sunday); half-day excursions normally commence at 2pm and may be either on a Saturday or Sunday. Full-day or half-day excursions are usually held on the weekend following the General Meeting. Campouts are held several times each year, usually coinciding with long weekends or holiday periods.

The Bendigo Field Naturalists Club has 2 active sub-groups:

**Bird Observers Group**: meets on the first Friday of the month, at 7:30pm. The venue for meetings is the Golden Square Senior Citizens Building.

**President**: Anne Bridley
**Secretary**: Jane Cleary

**Mammal Study Group**: meets on the fourth Wednesday of the month at 7:30pm in the Golden Square Senior Citizens Building.

**Chairman**: John Burtonclay, Fadersons Lane, Mandurang (5439 5710)
**Secretary**: Bill Holsworth, 13 Nabilla Crs., Bendigo (5443 4063)
**Equipment Officer**: Maurie Lewis (0407 427179)

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**Front Cover:** Photographer: Marika Neumair
This photo was taken by one of Dr Robert Seviour's third year students of Microbiology and shown in his talk during the June General meeting. It shows ascospores of *Emericella variecolor,* an ascomycete. When the fungus is in imperfect (asexual) stage it is called *Aspergillus stellatus*. The circular central portion of the spores is approximately 3 μm across.

# WHIRRAKEE

Monthly Newsletter of the Bendigo Field Naturalist Club

Vol. 21, No. 6, July 2000

*Whirrakee* takes its name from the Whirrakee Wattle (*Acacia williamsonii*) which is virtually endemic to the Bendigo region

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Authors are responsible for the accuracy of the information they use and also for any opinions expressed in their articles.
Contributions will be included as soon as possible after they are received, although articles received more than one week after the monthly General Meeting will probably be too late for inclusion in the next issue of *Whirrakee*.
Articles in *Whirrakee* may be reproduced, but permission should be obtained from the Bendigo Field Naturalists Club, and acknowledgment should be given to the author and the Club. Some back issues are still available on request.

*Editors' Note*
*You may rarely look at the inside front cover of this magazine (other than perhaps to find out what the thing on the front cover is) but please do so this time. The new membership fees printed there apply from 1st September (and they include the GST!). The fees are due prior to the September meeting (Annual General Meeting). Of the many interesting contributions this month, there is Part One of "The Turtles of Bendigo" by Darren Green. Sounds promising? I shall not tell you how many parts there are, but if you are interested in turtles, this will keep you reading for a while! Many thanks to Darren for this wonderful contribution.*

## News from the Garden

Author: Barbara Chmielewska

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Most of the news is good news.

The only bad news is that the Fire Brigade might expand onto the garden, so the proposed area 4 had to be reduced to allow for the possible expansion. This is why the mulch does not extend to the Fire Brigade's fence. The mulching of the reduced area 4 was completed during the last two working bees which were held on the 21st of May and 11th June.

The 21st May was a special occasion with Jack Ipson planting an ironbark tree which he has bought and grown especially for the garden. Jack also brought his family with him on that day to work in the garden, which we appreciated very much, especially as we would have been very short-handed without them.

For Sunday 11th June, Anthony ordered mulch and a bobcat for spreading it. However when I arrived at the Club rooms on Saturday to deliver the papers, there was no mulch delivered. I rang Anthony and he must have performed some 'magic' because when we arrived on Sunday for the working bee, mulch was already there. In spite of this near-mishap with the delivery of the mulch, the working bee went very well indeed. The Bobcat made our work very easy – we only had to spread and wet the newspapers and rake the mulch spread by the Bobcat.

It was the shortest working be we ever had. Because we finished early, we had an extra long morning tea. Even Diana's beautiful dog Tasi had a lovely time running around, while Diana worked in the garden.

All that we had to do on the 25th June was to plant and hope that all the plants will grow.

The garden is growing and improving in appearance. I had a lot of positive comments about it. Because area 3 is now established, we have a much smaller weed infestation in areas 1 and 2. The Wandering Postman has self-seeded on to the nature strip and so have salt bushes throughout the garden. This means that the garden is becoming established and healthy. I have also noticed a flock of thornbills in the garden, which is really great. Because the grasses are producing seeds, we might get grass parrots as well.

Unfortunately weed infestations from the surrounding areas will continue to be a problem so we will need to have working bees for weeding.

**The next working Bee will be on Sunday 27th August, 2000 at 9am.**

This working Bee will be to prepare the garden for the 'Spring in the Bendigo Bush' Wildflower Show which will be on Saturday 2nd and Sunday 3rd September, 2000.

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## Has the Eurasian Tree Sparrow Finally Found its Way to Inglewood?

Author: Fred Watts, Inglewood

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About a fortnight ago in early May my wife and I were surprised to see one bird feeding with House Sparrows that were endeavouring to obtain millet seed from our fair-sized small mesh wire netting enclosure that enables some 40 to 50 Zebra Finches to feed and leave without the House Sparrows devouring most of the seed. Then, this week, there were two Tree Sparrows joining the throng.

Perhaps the Tree Sparrow is less troublesome than its unpopular relative, anyway it is a change to see it at home, instead of scavenging for crumbs outside Gillies Pie Shop in Bendigo's Mall.
These birds may have been around the town for years but I have not heard of any sightings since our return in 1978.

**Threatened Bird Network, Volunteer Activities**
**Regent Honeyeater and Swift Parrot Searches.**

August 5/6
Contact: Simon Kennedy, phone 5430 4357.

Grey-crowned Babbler Tree Planting at Violet Town and Euroa in July - August
Contact: Birds Australia, phone 98822622

For other activities with threatened birds contact Birds Australia or consult the Club's copy of *Volunteer*, newsletter of the threatened bird network.

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**Bird-Atlassing Outings in the Bendigo Area: July – December 2000**

Outings are on the first Sunday of each month. Most outings will be half day, but bringing some morning tea/lunch would be advisable. Meet at the Senior Citizens Centre, Old High Street Golden Square at 9am unless otherwise advised. Please contact Anne Bridley (ph. 54 494379) if attending.

July 2– Huntley area - Wellsford State Forest.

August 6– Sedgwick State Forest/Swift Parrot Survey.

September 3– Bullock Creek/East Loddon Area

October 1– Loddon River/Serpentine Area.

November (date to be confirmed)–
Tang Tang Wildlife Reserve.

December 3– Marong State Forest.

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**Birds at Spring Gully Reserve, June 2000**

Author: Maurie Lewis

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Weebill – near the sand
White Treecreeper – at the back gate
Striated Pardalote – along the pipe line
Tawny Frogmouth – at the front wall of dam
Eastern Rosella – near the sand , site 3
Musk Lorikeet – everywhere
Fairy Wren – front gate
Red Wattle Bird – everywhere
White-eared Honeyeater – near site 5
Fuscous Honeyeater – near sand
Golden Whistler – at site 1
Owlet Nightjar – at site 1 boxes
Scarlet Robin – at site 1
Grey Currawong – up the back along pipe
White-winged Chough – at the back fence
Mistletoebird – male, at front gate
Silvereye – up the back
Yellow-tufted Honeyeater – site 2
Crested Bell Bird – John B.clay heard it calling
Little Crow – front gate
Magpie Lark – site 2
Grey Fantail – at front gate
Rufous Whistler – at the back pipe

**Other Bird Observations:**

11/6/00 at house in Sherman Crt, Spring Gully: Silvereye, New Holland Honeyeater, White-plumed Honeyeater, White-eared Honeyeater, Yellow-faced Honeyeater, Yellow-tufted Honeyeater,

11/6/00 at Spring Gully Creek:
Blue-faced Honeyeaters, 9 birds

12/6/00 at Spring Gully Dam Wall:
Southern Boobook

**From the Mailbag**
Author: Elaine Mathison

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Each month the club receives a number of newsletters and magazines: some by subscription and some in exchange for Whirrakee. These are available from the club library.

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**THE BIRD OBSERVER**(BOCA)
April 2000

"Hiding at Hervey Bay" describes the setting up of a temporary bird hide to the south of Hervey Bay, Queensland. This gave the opportunity to view the many wader species which feed on the mudflats.

"The Joy of Swifts" reports on a variety of observations of Spine-tailed Swifts(White-throated Needletails) in southern Victoria and in Queensland. Of particular interest are the 'swift visitations' described by the writer.

"White-throated Needletails" by Ken Simpson gives more details of this species: anatomy and characteristics, breeding, migration, courtship, feeding, etc,

"Inland Nomads on the Fringe" by Roger Standen reports on Black and Pied Honeyeaters and other species seen at Terrick Terrick National Park and Goschen Flora Reserve in northern Victoria.

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**PARK WATCH**(VNPA)
June 2000

"Protecting the Platypus" by Marianne Worley & Melody Serena explains how platypus populations can be encouraged with attention to stream habitats. Results are given of detailed habitat studies in western Victoria.

"Mount Franklin" by Daniel Catrice outlines the history of this area, part of the Hepburn Regional Park. Archaeological evidence shows that the mountain and its surrounds were of great significance to the Aboriginal people.

Also:

- Bushwalking in the Douglas-Apsley National Park in north-eastern Tasmania
- The Fastest RFA in the West: looking at the Western Regional Forest Agreement
- Environment Conservation Council Box-Ironbark study: a review

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**FIELD NATS NEWS**(FNCV)
June 2000

- Floral traits of Eucalyptus
- Excursion to Mt. Donna Buang
- Reproduction in Arboreal Mammals: Feathertail Glider and Eastern Pigmy Possum

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**Also received recently:**

*Castlemaine Naturalist(CFNC)
June 2000
*Geelong Naturalist(GFNC)
June 2000
*Newsletter(Ballarat FNC)
June 2000
*Environment Victoria News
April 2000
*The Web(Threatened Species Network)
May 2000
*State of the Environment Newsletter
April 2000

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**Excursion Report**
**Fungi at Bullarto, Sunday 18 June 2000**

**Author: John Lindner**

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We have not made the trip down south, which at one stage was a regular event under the expert leadership of Reg Smart, for a number of years. So this was a follow-on from the encouraging fungi reports of the Orrs and other contacts.

We made our first stop at a location quite randomly selected along Babbington Road, off the Daylesford-Trentham Road a few kilometres east of Bullarto. Here the Wombat Forest has been selectively logged on one side of the road but is untouched on the other. The logged side is now quite green, but very open in nature with a lot of burned and rotting timber. The unlogged side is comparatively dense with shrubs, grass and much leaf litter. However both sides of the road had quite a good selection of fungi.

Our second walk was at Bullarto Reservoir itself, where after lunch we rambled down the gully issuing below the dam wall. The variety here was pretty astonishing too.

On the way home, we called in at Mount Franklin to specifically inspect a very large specimen of the Ghost Fungus on which Rod and Jan had reported at the club meeting. Unfortunately it was well past its peak even in that short time.
Here is list of the fungi that we observed at these locations:

*Amanita muscaria* Fly Agaric
The well known bright red fungus with the white spots, found beneath exotic conifers at Bullarto Reservoir.

*Boletus portentosus* Boletus species
Very large spongy fungus with a brown cap and orange tube-bearing tissue beneath.

*Calocera guepinioides* Jelly Fungus
Very slender little yellow or orange rods growing out of cracks in fallen logs.

*Calostoma fuscum* Pretty Mouth Fungus
A peculiar puff-ball with an ornamented orifice, supported on a tall strangely textured stem. The puff-ball itself is exposed when the cap is shed.

*Cortinarius violaceus* Cortinarius species
Purple cap and mauve gills.

*Cortinarius sanguineus* Cortinarius species
Crimson cap, gills and stem.

*Cortinarius ochraceus* Cortinarius species
Yellow-orange cap, gills and stem. Very slimy.

*Cortinarius austro-venetus* Cortinarius species
Yellow-green cap, gills and stem.

*Cortinarius aff. albo violaceus* Cortinarius sp.
Pale lilac cap and cinnamon brown gills. Not slimy.

*Cortinarius albidus* Cortinarius species
White all over.

*Crepidotus applanatus* Ear Fungus or Ear Bracket
A very, slimy limp bracket, pale in colour, growing on wood.

*Geastrum indictum* Earth Star
A leathery, star-shaped structure flat on the ground, holding a delicate spherical sac of spores.

*Heterotextus peziziformis* Yellow Jelly Bells
Pale yellow, top-shaped, slimy, growing on wood.

*Hypholoma sublateritium* Brick Cap
Clumps of orange-brown capped fungi, growing on wood.

*Lactaria deliciosus* Saffron Milk Cap
Pale orange all over, found beneath the conifers at the reservoir

*Lepiota gracilenta* Slender Parasol
Only a few withered specimens remained after the frosts or snow.

*Mycena interrupta* Pixie's Parasol
Very tiny, deep blue-capped fungi on logs, but past their best.

*Mycena subgalericulata* Grey Bonnet
Small, crowded grey-brown fungi with white stems, colonising stumps.

*Nidula emodensis* Bird's Nest Fungus
Very tiny, hairy cups, with spore-bearing containers ("eggs") clearly visible inside, growing on wood.

*Oudesmaniella radicata* Rooting Shank
Brown cap with pale gills and stem. This species has a long root attached to underground wood.

*Paxillus infundibularis* Paxillus species
The orange cap is deeply indented and the gills run down the stem.

*Peziza repanda* Orange-peel fungus
Growing flat on the ground, orange coloured, and somewhat as its name suggests. Spores

could be made to puff up from the surface by breathing warmly on it.

*Pleurotus nidiformis* Ghost fungus
Very large white, gilled fungus, emanating as large curling structures on wood. Low intensity light is emitted in the dark.

*Ramaria fumigata* Coral fungus
Purple or purple-grey, deeply branched with fine tips. On the ground.

*Ramaria* sp. Coral fungus
Similar but orange.

*Russula persanguinea* Russula species
Red cap and white gills.

*Russula mariae* Russula species
Purple cap and white gills.

*Tremella fuciformis* Jelly Fungus
Clouded, jelly-like and rather formless fungus on very wet wood in shade

Unknown Bracket fungus
Grey-brown with a pale edge, growing on stumps

Two other very tiny fungal fruiting bodies were found amidst moss and lichen on wet, shady logs. One comprised very fine, transparent, twisted stems with brown caps, opening into four parts bearing spores: it is possible however that these belonged to the moss. I was not sure myself. The other was more definitely associated with lichen, being the fruiting body of the fungal part: it comprised 2-3 mm. pink, rubbery bodies, nestling directly on the green surface.

You can see that the most common fungal types were gilled, with Cortinarius the most diverse of these, and the most difficult to be quite sure of identity.

Unfortunately we felt that we probably missed the full flush of the fungi as our visit was after snowfall at the start of June and some recent strong frosts. Nevertheless the variety we discovered in somewhat less than two hectares was enough to keep us very busy.

Fourteen members participated in this excursion - Sue Beattie, John Lindner, Rod and Jan Orr, Henni and Allan Spence, Tony Sherwood, Diana Collier, Stan Pelczinski, Barbara Chmielewska, Matthew Comer and Rob, Glenise and Hal Moors.

**References**

Cole C., Fuhrer B., Holland A., (1978), *A Field Guide to the Common Genera of Gilled Fungi in Australia.* Melbourne: Inkata.

Fuhrer B. (1985), *A Field Companion to Australian Fungi.* Melbourne: Five Mile Press.

Macdonald R. and Westerman J. (1979), *A Field Guide to Fungi of South-eastern Australia.* Melbourne: Nelson.

Please note that other, more recent publications taken by other people are not listed. The complex taxonomy may not be up to date in many cases, and often differs between references.

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**June General Meeting: Environmental Law Speaker: Barry Phillips**

Author: Sabine Wilkens

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Barry Philips, whose special interests include environmental law, environmental management, laws of intellectual property and church law, gave us a summary of the changes that have occurred in recent years in the field of environmental management.
Some encouraging cases were given of large companies who have made good by looking at managing with an all-encompassing system, including environmental matters, The dairy industry, for example, a very polluting industry produces much liquid waste. Often this ends up in waterways, adding to nutrient loads. An alternative adopted by one dairy manufacturer was to pump all effluent into holding ponds, then, after settling, use it for irrigation.
Another company this time, a canning company decided to re-write all managerial job description to include environmental management responsibilities and engaged outside help to identify many areas of real and potential waste. After these were addressed 5 year ago and acted upon, the company has recovered over a million dollars since their initial investment.
Both companies have done well in many areas (financially, public relations, employer relations etc) after their investment in environmental management.

This was timely talk as the ECC report had just been published and many members were awaiting anxiously some information on what they can and cannot do legally in response to this report.

This became obvious during question time. Barry said that legally it very difficult to challenge decisions made at that level, unless it can be proven that the decision was made by the wrong person, or based on irrelevant or incomplete or incorrect information.
However the legal avenue is by no means the only one. In the case of the ECC report, there was the consultative meeting on June 22, as well as writing and writing and writing submissions in response. Publicity is also great a leveller in these matters, in fact if you can get the media on side, you are way ahead.

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**Bendigo Field Naturalists Minutes of the General Meeting 14th of June, 2000**

**Present:** 35

President Rod Orr welcomed members and friends.
Minutes of the May meeting read and accepted on motion of M. Lewis seconded W. Holsworth.

**Business arising:**
1. ECC Box-Ironbark Draft Report now available. Bendigo briefing, at Clubrooms on Thursday 22nd June, 3-7pm.
2. June excursion to look at fungi. 18th June, at 9am. GSSC. depart - full day to Daylesford area.

**Nominations:**
1. Jacinta Tuohey,
nom. M. Lewis, sec. J. Burtonclay
2. Danielle McLenan,
nom. M. Lewis, sec. J. Burtonclay
3. Shane Southan,
nom. M. Lewis, sec. J. Burtonclay
4. Dr Ruth Lawrence,
nom. B. Chmielewska, sec. B. Leeson
5. Lesley Hodgson,
nom. B. Chmielewska, sec. S. Pelczynski
6. Phil Robertson,
nom. R. deMoel, sec. J. Lindner

**Correspondence:**
1. G.S.T.A:B.N. official number received.
2. Birds Australia, appeal for funds to purchase land.
3. Box-Ironbark Forest and Woodland Investigation Draft Report received - available to members.

**Guest Speaker:**
Barry Philips from La Trobe University to speak on Environmental Law. Our speaker was introduced by J. Cleary. Barry gave us an overview on the laws relating to the environment both on land and along the coast. He was thanked by W. Holsworth.

**General Business:**
1. Stan Pelczynski reports on new speed limit sign erected in Bennetts Road.
2. Bill Holsworth announced the forthcoming Mammal Group meeting to discuss the submission prepared in response to the Box-Ironbark report.
3. Swift Parrot count - August 5-6
4. Anthony Sheean presented plans for proposed plantings along Bendigo Creek and adjacent to G.S.C. Clubrooms including the area around the Gold Monument. It is planned to use local species in these plantings.

**Reports and Excursions: –**
1. Nest boxes in Spring Gully reservoir. A number of boxes have been vandalised. In the remaining boxes were 12 sugar gliders with young, tuans and owlet nightjar. Next inspection - Sunday 10-1 meet at Spring Gully Store.
2. Bird List from M. Lewis - to go to *Whirrakee*
3. J. Cleary reported on recent Earthwatch Expedition to Eilat, Israel to observe migrating raptors (counted) and small birds.
4. Barbara Chmielewska reported on recent garden working bee when papers were spread and then mulched. The use of a bobcat for this task was greatly appreciated. The next working bee to put in new plants will be on Sunday, 25th June, at 9am.
5. Rod Orr reported on the Friends of the Botanic Garden excursion held on Sunday 21st May. Together with the Friends of the Art Gallery members were shown paintings of early Bendigo with an explanation from Glenise Anthony. This was followed by a guided walk led by James Lerk through part of the Old Government Camp (see page 11 of this *Whirrakee*). The next excursion will be a walk along the Linear Park from Lake Weroona to White Hills Botanic Gardens.

**Meeting closed at 9:40pm.**
Members continued discussions over supper.

**The Turtles of the Bendigo District**
**Part One**
**Introduction to Turtle Behaviour**

Author: Darren Green

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As a whole, this article is an introduction to the freshwater turtles that occur within the Bendigo district (see BFNC books for map details of the Bendigo district). The information presented is a continuation of the material presented by Green (1994) in Whirrakee, with further comments of the author's observations. This article is an attempt to give the reader an interest and understanding of our freshwater turtles. For those readers who wish to pursue further details of the natural history of these turtles, more information is given in Cann (1998) and other references as cited. Due to its length, this article will be given in several parts, beginning with behaviour and diet. The turtles that occur in the Bendigo district are namely the Macquarie River Turtle (*Emydura macquarii*), the Eastern Long-necked Turtle (*Chelodina longicollis*), and the Broad-shelled River Turtle (*Chelodina expansa*).

Observations were largely confined to Lake Weeroona due to its ease of accessibility, relatively short distance around the perimeter (several laps of observation can be achieved each visit), and being a "closed" system where populations may stay for extended periods (although *C.longicollis* is known to migrate overland). Similar observations were also made at Lake Tom Thumb, Kennington Reservoir, Bendigo sewage farm pondage, local dams and creeks, and the Loddon and Campaspe Rivers and associated Lakes (ie. Cairn Curran, Eppalock, etc.).

**General Behaviour**

The turtles of the Bendigo district, and for that matter all Australian turtles, totally rely on freshwater for their survival. They feed, court and mate in the water, only leaving it to lay eggs or bask. Hence, the turtles habitat reflects its aquatic existence, preferring to inhabit permanent rivers and backwaters, creeks, lagoons, billabongs, ponds and lakes. Rocks or fallen timber protruding from the water, as well as banks, are used to bask on, or hide under. Basking sites are usually in the open where the turtle is able to benefit from the maximum amount of available sunlight, and where approaching predators are readily seen. Some turtles, such as the Macquarie River Turtle, are often seen to bask in groups thus increasing the chance of observing predators. As soon as one basking turtle sees danger threatening it immediately plunges into the water, triggering a chain reaction amongst the entire group.

Turtles, like all reptiles, are ectothermic (sometimes called cold-blooded) and rely on external source of heat to maintain their body temperature. This may be accomplished through their basking behaviour, such as moving into the sunlight to raise its body temperature or retreating into the shade if it becomes too hot. Their daily pattern of activity revolves around maintaining an appropriate body temperature primarily through their basking behaviour. Raising the body temperature enables normal bodily functions, such as food digestion, to occur. Basking also aids in the shedding of skin and shell scutes (segments of the shell), similar to that of a snake except the skin comes off in pieces and the scutes are shed entire.

Turtles generally leave the water to bask on the river banks or protruding rocks and logs. *Chelodina* species, however, are less inclined to bask on land in comparison to Macquarie River Turtles. Similarly, the author has not observed captive or wild turtles basking when air temperatures are below 16oC. Turtles will also float in the upper surface waters (aquatic basking) which may be warmer due to heating from the sun's rays. This is particularly true where the deeper reaches of some waterways may be chilly.

**Winter Behaviour**

Bendigo's turtles will spend the cooler part of the year (ie. winter) in a state of brumation (reptile equivalent of hibernation) and are not readily observed. They may, however, still be active at various times. For example, the author has observed *E.macquarii* slowly swimming at the water's surface in winter at Kennington Reservoir at around 10.00pm. Brumation is the reptile equivalent of mammal hibernation. It is in this state that the turtles metabolism slows down, mainly due to the cold water (remembering that reptiles are ectothermic and rely on an external source of heat to maintain their body temperature). As their body functions are minimal in this state, so too is their oxygen requirements (turtles are also more tolerant of high carbon-dioxide levels in the blood than that of other reptiles or mammals). The turtle extracts oxygen from the water through special "glands" located in the cloaca (a single opening

at the base of the tail were both reproductive and alimentary organs are found), or in the case of *C.expansa*, also in the mouth (pharyngeal respiration). Hence, turtles may stayed submerged for extended periods (ie. months) in a state of brumation. If a turtle is disturbed during brumation, it is able to sufficiently "awaken" and flee from danger.

To find brumating turtles one must spot-light from the bank (which is usually unsuccessful at this time of the year), snorkel if the water is clear enough, or the most successful method is muddling (feeling around in the mud at the bottom of the water). In Lake Weeroona and Kennington Reservoir, snorkelling/muddling methods were utilised along the undercut banks and weed mats, amongst the tree roots, and around the islands. It is here that *C.longicollis* was commonly encountered. The bottom of the lake was also randomly searched, feeling with the feet, to a depth were breathing became difficult (ie. approximately 1.5 metres). Only one each of *C.expansa* and *E.macquarii* was found during winter, thus suggesting they brumated in deeper waters. No turtles were found to brumate on land.

**Diet**

Turtles are opportunistic feeders, that is they will eat whatever is readily available at the time. The Eastern Long-neck and Broad-shell Turtles, being entirely carnivorous, will feed upon aquatic invertebrates (eg. worms, snails, shrimps, daphnia,. water bugs, nymphs, larvae), terrestrial invertebrates (eg. worms, snails, spiders, slaters, millipedes), insects (eg. dragonflies, earwigs, grasshoppers, bugs, beetles, flies, moths), and vertebrates which is usually in the form of carrion (eg. fish, fish eggs, reptiles, birds, and mammals). The Macquarie River Turtle will is also feed upon the above foods, however being omnivorous (eating both animal and plant material), plant material may make up to about 50% of its diet in adults, while juveniles are mostly carnivorous (Chessman 1986). Some plant materials in the diet of the Macquarie River Turtle include filamentous algae, aquatic plants (eg. Chara, Vallisneria), and terrestrial plant detritus.

**Handling Turtles**

As with most wild animals, turtles also do not like to be handled, however on occasion it may be necessary (eg. move one off the road, help an injured turtle, research, etc.) and handling techniques are therefore addressed here. Most *Chelodina* turtles are quite placid and will usually hide its head within its shell, they may however scratch with their claws in an attempt to get away. *Emydura* Turtles will vigorously wave their legs around, scratch in an attempt to get away, and even try to bite fingers that come too close. An inexperienced handler would easily drop such a turtle. The turtles powerful legs and sharp claws are able to break human skin and their strong bite can be painful, otherwise turtles are relatively harmless with first aid being the only medical attention required.

Always pick up a Turtle with both hands, the fingers under the plastron (underside of the shell) and thumbs on the carapace (upper surface of the shell). Care should be taken that larger turtles don't get a foothold on your hands or arms, and get away from your grip (not to mention scratch). In this case it is much easier to hold larger turtles by both back legs where it is harder for the turtle to struggle and do damage to itself or you (such as scratching). Avoid picking smaller turtles up by the edge of the carapace, particularly with juveniles or those with calcium deficiencies (ie. soft shell), as this practice may result in shell deformities if done repeatedly. Ideally let small turtles sit in the palm of your hand, with the other hand gently cupped over the surface of the carapace to prevent any sudden jumps onto the ground. If the turtle is struggling too much, then hold the turtle with your fingers under the plastron and thumbs on the carapace, as mentioned when you pick them up.

**Further Reading**

CANN, J. (1998) Australian Freshwater Turtles, Cann & Beaumont Publishing, Singapore.

CHESSMAN, B.C. (1983) Observations on the Diet of the Broad-Shelled Turtle, *Chelodina expansa*, Aust. Wildl. Res. 10, pp169-172

CHESSMAN, B.C. (1984) Food of the Snake-Necked Turtle, *Chelodina longicollis:* in the Murray Valley, Victoria and New South Wales, Aust. Wildl. Res. 11, pp573-578

CHESSMAN, B.C. (1986) Diet of the Murray Turtle, *Emydura macquarii* (Gray), Aust. Wildl. Res. 13:65-69.

GREEN, D. (1994), Tortoises of Bendigo, B.F.N.C., Whirrakee 15(1):3-4.

GREEN, D. (2000) Keeping Long-necked Turtles *Chelodina species*, Australian Reptile Keeper Publications, Bendigo.

GREEN, D. (2000) Keeping Short-necked Turtles *Emydura species*, Australian Reptile Keeper Publications, Bendigo.

**Notes from the Friends of Bendigo's Botanic Gardens Activity:**
**Art Gallery & Rosalind Park**

Authors: Rod Orr

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At the Art Gallery, **Glenys Anthony** explained features of Ludwig Becker's watercolour of early bendigo ('Bendigo Flat 1854'), and a watercolour by George Rowe - both of these works were brought from storage especially for this occasion. We were seated facing the permanently displayed large images of early Bendigo which Glenys also described and interpreted for us ('Sandhurst in 1866' by James Meadows & 'Sandhurst in 1862' by Thomas Wright).

Following this, **James Lerk** conducted a walking tour up View Street and into the upper section of Rosalind Park, stopping frequently to explain parts of Bendigo's rich history which were apparent only to the finely trained eye.

It is rather surprising that so much actual parkland still remains today when you listen to James explaining how sections of this large area of Government land were excised and used for so many other purposes. Some of these uses were associated with the operation of the Government Camp, others were obviously used in the public interest, but many areas were permanently alienated from public use for purely commercial enterprises conducted on what was once public land. Initially, it appears, that many of these private enterprises were little more than squatters on land managed by the Government Camp and, in several cases, the Council eventually insisted that they should purchase the land they occupied. This legalised their occupation but converted much of the North side of View Street to freehold land.

**Art Gallery** - formerly the Drill Hall for the Volunteer Rifle Brigade (since 1889)
**Masonic temple** - designed by William Vahland (now the regional Arts Complex)
**Temperance Fire Brigade** - designed by William Bebe.
**Dudley House** - formerly the house occupied by the Government Surveyor Unit.
**QEO** - Grandstand was erected in 1891.
**Parade ground** - the flat area inside the gates of the QEO between Dudley House and the grandstand where the Rifle Brigade trained.
**Commissioner's Gully** - now the playing area of the QEO.
**Ironbark Ridge** - Hustlers Hill, Valentine Street area (source of sandstone masonry blocks for construction - Barracks etc.).
**Powder Magazine** - was in the area now occupied by the carpark behind QEO.
**Caretaker's Cottage** - still exists (behind QEO, near the carpark).
**Poppet Head** - erected in 1931 (shifted from Garden Gully Mine - this mining company paid the best dividends). A flag was flown from the top to signal the arrival of mail because of the complete absence of trees the flag could be seen from all parts of Bendigo. The poppet head was designed to have six legs, although only four were used in its construction as a lookout tower.
**Stables** - now a multi-purpose storage room for Camp Hill P.S.
**Camp Hill P.S.** - the School was the second constructed on the hill - designed for 1100 students.
**Police Barracks** - constructed from local sandstone ad built by local workers - had no damp course and fell into disrepair because the local stone powders away when kept damp. Rescued from collapse in the 1960s by community pressure and restored largely by public subscription and voluntary work - now used by bendigo Senior Secondary College as an Information technology Centre.
**Bristol Portable Building** - built from aluminium sections prefabricated in Bristol (using aircraft construction techniques)
**Original Court House** - Lachlan McLoughlin (Bendigo Mack) the Chief Magistrate presided during the early days of the Government camp.
**Bendigo Jail** - present building is a much more humane replacement of the original cast iron jail where inmates either froze or baked depending on the season.
**Original Cemetery** - now the carpark opposite the Senior Secondary College - some bodies are still buried on this site under the asphalt - others were relocated to the White Hills cemetery.

James also spoke of the meandering nature of Bendigo Creek of which little remains except for the straightened, channelised modern version through Rosalind Park. The fernery now occupies what was once a bend in the creek - it still has three of the Red Gums from the original creekscape! The Fernery was created as a display area for a private collection of ferns assembled and grown by a councillor. This area of public land was redeveloped at the whim of one influential person to display his private collection - surely nothing like this could happen today! The Fernery has evolved, largely through neglect, into its present form today. 500 squatters lived at the back of Camp Hill - they were eventually evicted after the Council took over control of the Camp reserve in 1862. One serious problem associated with the large number of people living in and near the Camp Reserve was the disposal of sewage - much of this material was simply tipped into a large dam near the top of the hill - this enriched area of land

is now used as the Bendigo Lawn Tennis Courts.

The granite Gate-way warrants special notice, commemorating 'Good Mothers'. James also told us of the proposal to extend Mundy Street through the Park to provide 'more convenient access' to Barnard Street - fortunately (and rarely?) this was resisted by the Council of the day to protect the integrity of the Park.

Some of the statuary features of the Conservatory section of the Park (e.g. 'Venus' - in Carrara Marble) were donated by wealthy benefactors - the statue of King George V was commissioned following a public appeal for funds (reduced to only half its intended size because the One Shilling Appeal coincided with the depression). The statue of the shepherd being attacked by a leopard which was being attacked in turn by a wolf, was purchased from the Harkness Estate. James pointed out important features of the Court House and Post Office which were designed to be viewed unobstructed from the Park but have been obscured by all sorts of accretions. The Police Station, Telstra building and the rear end of the RSL building are partially noteworthy examples of intrusive architecture which prevent all-round views of Pall Mall's significant buildings.

We stood and breathed in the Creek atmosphere which James explained was more Hydrogen Sulphide now than early in Bendigo's days when gold-bearing quartz was roasted to release the gold it contained - then Bendigo's characteristic smell was determined more by the Arsenic content of the minerals associated with the ore. The Hustlers Royal Reserve mine still releases sulphate-rich water into Bendigo Creek behind the RSL building and Hydrogen Sulphide-rich air into this part of Rosalind Park.

We were told where the first Bendigo Bank was sited inside the Government Camp for security and convenience for the safe transfer of gold and how it upgraded itself into a larger, more secure building, with time. Each move, however, remained inside this section of the Government Reserve, public land managed by the Government and later by Council These banking activities were purely private enterprises being conducted on Public land until this occupation was legalised by the purchase of freehold title from the Council.

James led us back up the hill past View Street's other grand buildings (which were all constructed on government land) - Sandhurst Club, Penfolds Art Gallery, Sandhurst Trustees, Women's Temperance Hall, Trades Hall, (the ANA hall which was next to the Art Gallery was demolished and the site used for a Motel - which has since been demolished in its turn) and back to the Art Gallery.

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**VFNCA Spring 2000 Camp Out**

**October 12th to October 15th**

**Based at Kismet Riverside Lodge, Corowa Road, Howlong N.S.W.**

Host : Albury Wodonga Field Naturalists Club.

*The program for outings and talks will include:*

**Nail Can Hill Reserve and Monument Hill Parklands** which surrounds Albury on its western edge.
The open forest country is dominated by Red Box, Red Stringybark and Red Gum, it has a rich variety of birdlife and vegetation with 43 species of native orchids that have so far been identified.

**Bonegilla Grasslands** which is managed by DNRE. It has a rich variety of native grasses and rare orchids.

**Wonga Wetlands and Kremur Street Ponds.** Dominated by River Red Gums and situated on the Murray River floodplain just west of Albury, these two wetland systems support abundant and diverse waterbird communities. The Wonga Wetlands, since being flooded 3 years ago, are increasingly supporting uncommon waterbird species. The hydrology of these seven lagoons is relatively natural because the area mostly dries out in summer when the pine and eucalypts plantations require irrigation. The Kremur Street Ponds are well established and consistently provide superb waterfowl viewing.

**Lower Ovens River, Peechelba**. (led by Ian Davidson of Greening australia). This is the most intact lowland inland river left in Victoria (probably southern Australia). It is the only major river with little regulation; it contains the most intact native fisheries in Victoria and in places there also remains intact native bank vegetation with a very diverse flora and fauna.

Ian Davison will also give an evening talk on our **disappearing woodland birds of the sheep/wheat belt area.**

**Chiltern Box Ironbark National Park (4 320 ha)**. Situated north and south of the Hume Freeway on the eastern side of Chiltern, the National Park protects several historic gold mining sites and has a high conservation value, the Box Ironbark Forest is the most significant

remnant in north-east of Victoria. Trees on higher rocky areas are stunted Blakeley's red Gun, red Box and White Box,while lower areas have grey Box, red Stringybark and red Ironbark. Spring Wildflowers include various lilies, orchids, wattles and bush peas. Over 200 species of bird including Turquoise Parrot and Regent Honeyeater have been recorded in the park, Eastern grey Kangaroos, Tuans, Antechinus, Gliders (Squirrel, Sugar and Feathertail), Common Brushtail and Ringtail Possums are also present.

**Mt Pilot Multi-Purpose Park**
Between Chiltern and Beechworth, Mt Pilot rises from the dry sclerophyll forest to 540 m giving views over the Murray Plains. On its western side Yeddonba Aboriginal Culture Walk goes past the remaining rock art. also the home of BArking Owls and Eagles, we will be checking their roost and nest sites.

**"Why We Need Floods"!**
A multimedia evening presentation by Mike Copeland dealing with the needs for "floods" to maintain the ecosystems in the River Murray, its floodplain and its billabongs. River regulation, to provide water for irrigation, has meant that we have become very good at managing the flow of water down the Murray Valley, but at what cost to the billabongs?

**Kentucky State Forest.** A remnant of White Cypress Pine *Callitris glaucophylla* and Buloke *Allocasuarina leuhmannii* woodland. This type of woodland has been destroyed to a greater extent than even the Box Ironbark woodland. This remnant shows damage from activities such as quarrying and grazing. A variety of other trees, shrubs and wildflowers are present and the birdlife includes Grey Crowned and White Browed Babblers, Apostle birds, Choughs, Common Bronzewings, Diamond and Peaceful Doves, Westerns Gerygone, Red-capped and Hooded Robins.

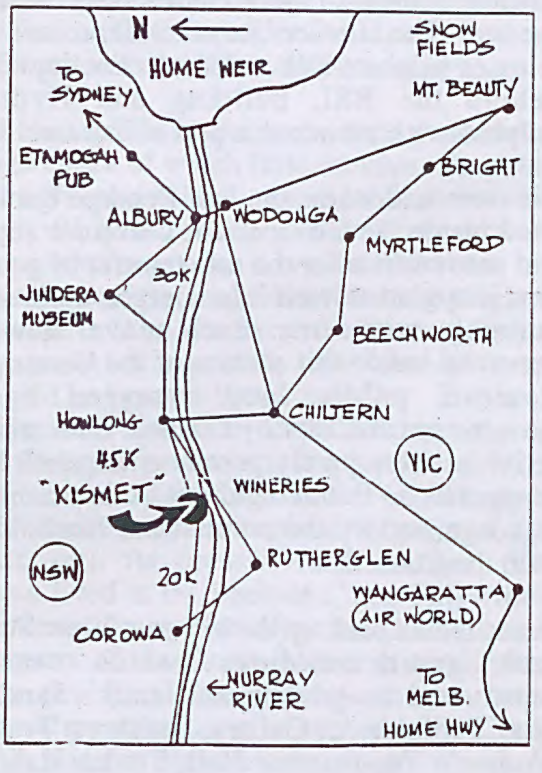
**Accommodation Guide**
This year's Camp out will be based at Kismet Riverside Retreat at Howlong, 35 km west of Albury on the north bank of the Murray River (in New South Wales), see map.

A blanket booking has been made for accommodation at Kismet and it is hoped most members will be accommodated here from where our activities and evening functions will be based. Enquiries on facilities and bookings should be directed to Kismet.

Kismet Riverside Retreat is a spacious and tranquil location on the Murray River with 35 acres, plus access to State Forest. It has functional Conference/Reception/Centre ideal for gatherings and workshops with a variety of on-site accommodation. Camping tent sites, caravan powered sites, ensuited power sites, 12 unit motel, cottage, older 4 bed House, plus 10 self-contained cabins. Facilities include a pool, tennis court, boat ramp, ideal for fishing, water skiing, swimming, bike riding, bushwalking and bird watching.

**Prices:**
Camping tent sites w/o power $5 pp per day
Caravan tent sites with power $8 pp or $15 dbl per day
Ensuited powered sites(4) $18 per day dbl p/day
Motel Units(12)$50 twin p/day $10 extra person
Cottage sleeps 4 $50 twin p/day $10 extra person
Old House 4 bedroom sleeps 13 $15 pp per day
Cabins (sleeps 2-4) $60 twin p/d $10 extra person
Amenities 3 showers, 3 toilets male/female - 1 disabled shower/toilet, 1 laundry
GST to be added

Enquiries including alternative accommodation options in Corowa, Rutherglen, Albury/Wodonga - **Contact:** Glenda Datson 0260 401090 or fax 0260 406242 email datson@albury.net.au
Neil Blair 0260 235964 (w) 0260 212097 (h), 0260 235965 (fax), email nblair@neilblair.com.au



# Bendigo Field Naturalists Club Inc.

## Speaker Syllabus for General Meetings – Second Wednesday 7:30 pm

| Date – 2000 | Topic | Speaker |
|---|---|---|
| 12 July | **Hollow Formation in Box-Ironbark forests** | **Les Vearing**<br>Forester in Charge, Bendigo Forest Management Area, Dept of Natural Resources and Environment, Box 3100, Bendigo Mail Centre 3554 |
| 9 August | **Fallen Timber and Fauna Habitat** | **Lawrie Conole**<br>3 Gezireh Street, Pascoe Vale South Victoria 3044 |
| 13 September | **President's Address at Annual General Meeting** | **Rodney Orr** |
| 11 October | **Soils of Bendigo** | **Nathalie Baxter**<br>Land Evaluation Officer<br>Centre foe Land Protection<br>P.O. Box 3100, Bendigo Mail Centre. 3554 |
| 8 November | | To be announced |
| 13 December | **Christmas Dinner** | No speaker this month |

## Diary

The General, Bird Observers Group and Mammal Survey Group meetings are held at the Golden Square Senior Citizens Building, Old High Street, Golden Square, unless otherwise indicated.

### General Meeting

**Wednesday, July 12, 7:30pm**
Les Vearing (Forester-in-charge, Bendigo Forest Management Area, DNRE) will talk about 'Hollow Formation in Box-Ironbark Forests'

**Wednesday, August 9, 7:30pm**
Lawrie Conole will talk about 'Fallen Timber and Fauna Habitats'

### Bird Observers Group

July 2– Huntley area - Wellsford State Forest.

August 6– Sedgwick State Forest/Swift Parrot Survey.

Atlassing Excursions are conducted on the first Sunday of every month. See page 4 for the year's program.
Meet 9am at the Clubroom, this is a half-day excursion.
Please contact Anne Bridley (ph. 54 493479) if attending.

### Mammal Study Group

The next regular monthly discussion evening is on **Wednesday June 28**
.Topic: Finalising the Mammal Group's response to the Environmental Conservation Council Report on the Box-Ironbark Forest Study Area.

### Supper

The usual arrangements for supper are as follows: members either bring a plate or pay $1 for supper. This small amount is used to reimburse members who purchase essential supper supplies.

## Other Events

**Next Garden Working Bee will be on Sunday 27th August, 2000 at 9am.**

This working Bee will be to prepare the garden for the 'Spring in the Bendigo Bush' Wildflower Show which will be on Saturday 2nd and Sunday 3rd September, 2000.

**Advance Notice**

**VFNCA Spring 2000 Camp Out**

**Based at Kismet Riverside Lodge, Howlong October 12th to October 15th**

Host : Albury Wodonga Field Naturalists Club.

For a program of outings and talks as well as contact information, see page 12.

### Wildlife Rescue & Information Network Inc.

W.R.I.N. is an organisation dedicated to the care of orphaned, sick or injured native animals.
It is fully endorsed by the Dept of Natural Resources and Environment.
Please call our Emergency Number for Help for Fauna in Need. Phone: 0419 356433

Matthew Comer
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GOORNONG VIC 3557